

DOCUMENT RESUME

ED 203 637

EC 133 322

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 TITLE Conversational Strategies of Learning Disabled Children.
 INSTITUTION Illinois Univ., Chicago. Inst. for Learning Disabilities.
 SPONS AGENCY Bureau of Education for the Handicapped (DHEW/OE), Washington, D.C.
 PUB DATE Oct 80
 CONTRACT 300-700-493
 NOTE 17p.: Paper presented at the Boston University Conference on Language Development (Boston, MA, October, 1980).
 EDRS PRICE MF01/PC01 Plus Postage.
 DESCRIPTORS *Communication Skills: Elementary Education; Expressive Language; *Interpersonal Competence; *Learning Disabilities: Peer Relationship; Verbal Ability

ABSTRACT

Conversational competence of 20 learning disabled (LD) second and fourth graders was examined through analysis of videotaped interviews between Ss and their peers. Results indicated that LD Ss were cooperative conversational partners who were able to participate in the reciprocal exchange of turns; however, they were less skilled than nondisabled children in initiating and maintaining a conversation with a peer and less able to sustain a dominant role than nondisabled Ss. LD Ss were less likely to use process questions which place a greater demand on the listener to produce extended narratives. LD girls and LD second graders began a greater proportion of their speaking turns with conversational devices. It is suggested that the failure to assume conversational responsibility may add to the LD child's social rejection by peers. (CL)

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CONVERSATIONAL STRATEGIES OF LEARNING DISABLED CHILDREN

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Paper presented at the Boston University Conference on Language Development, Boston, Mass., October, 1980

This research was supported by a research contract from the Bureau of Education for The Handicapped, Office of Education (US HEW OE 300 700 493) with the University of Illinois Chicago Institute for Learning Disabilities.

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It has been suggested that children with deficits in the acquisition of linguistic structure are also less willing to play an active role in conversations with parents and peers (Fey et al., 1978, 1980; Siegel, Cunningham & van der Spuy, 1979; Watson, 1977). Thus, one factor contributing to their delayed language development may be their lack of opportunity to test their hypotheses about linguistic rules in conversation with others. Conversational unassertiveness also seems likely to affect these children's social skills which evolve from positive interactions with peers. (Gottman, Gonso & Rasmussen, 1975)

The study described below is one of a series of studies examining conversational competence in a group of children who have been found to experience difficulty in both linguistic and social development, i.e., learning disabled children. There is increasing evidence that learning disabled children are impaired in most aspects of syntactic-semantic processing, notably, vocabulary development (Fry, Johnson & Muehl, 1970; Wiig & Semel, 1976), lexical retrieval (Denckla & Rudel, 1976; Wolf, in press) and the comprehension and production of syntactic and morphological structures (Fry, Johnson & Muehl, 1970; Moran & Byrne, 1977; Vogel, 1975; Wiig & Semel, 1976). These children also appear to have considerable difficulty in achieving social acceptance from teachers (Keogh, Tchir & Windeguth-Behn, 1974) parents (Owen, Adams, Forrest, Stolz & Fisher, 1971), and especially, peers (Bryan, 1974, 1976; Bruiniaks, 1978; Scranton & Rykman, 1979; Siperstein, Bopp & Bak, 1978). Thus, they appear to be especially at risk for deficits in the acquisition of the rules governing successful conversational interaction.

The findings of our previous studies suggest, however, that learning disabled children's conversational strategies depend upon how much support is provided in the social context. In conversations where clear turn-yielding signals, or "first-pair parts" (Schegloff & Sacks, 1973) are present, learning disabled children appear equally or even more responsive than normal children. For example, using a referential communication paradigm requiring children to describe shapes to an experimenter, we examined children's responsiveness to requests for clarification varying in explicitness (Pearl, Donahue & Bryan, 1979). Learning disabled children had no difficulty interpreting and providing another description in response to even indirect verbal requests. Although the youngest learning disabled girls were less likely to respond when the experimenter signalled her need for another clue by merely looking puzzled, young learning disabled boys were found to be more responsive than control children.

However, in situations which call for the child to initiate an exchange or where the context does not make clear what an appropriate strategy might be, learning disabled children are more likely to only minimally fulfill or even evade their conversational responsibilities. In a referential communication task where the child played the role of listener, learning disabled children who were found to be as skilled as normal children at recognizing ambiguous messages provided by an experimenter were still less likely to request clarification of these messages (Donahue, Pearl & Bryan, in press).

This pattern of findings was confirmed in a peer interaction study of group decision-making (Bryan, Donahue & Pearl, in press). Learning disabled and nondisabled children in grades 3 through 8 were asked to reach a group consensus on the rank ordering of 15 possible gifts for their classroom.

Although learning disabled children contributed the same proportion of conversational turns to the interactions, their strategies for participating were found to be less assertive and less persuasive than those of nondisabled children. The learning disabled children were more likely to agree with the other children's opinions, and less likely to disagree or to argue for their own opinions. In addition, they made fewer attempts to hold the conversational floor and to monitor the group's progress. However, the learning disabled children were more likely to respond to requests for opinion addressed to the group. These results suggest that these children were trying to participate in the conversation, but without offending their partners or perhaps taxing their productive language abilities.

Thus, it is not clear whether these children's conversational unassertiveness is an attempt to compensate for their language deficits or whether they are playing a deferential role as a reflection of their low social status with peers. The purpose of this study was to examine learning disabled children's ability to initiate and sustain a conversation with a peer when placed in a dominant social position, that is, when playing the role of a talk show host interviewing a nondisabled classmate.

METHOD

Subjects

Subjects were second and fourth grade students who attended two suburban Chicago schools. All children were Caucasian, native speakers of English and from upper-middle class backgrounds. The learning disabled group was selected from the school-identified learning disabled population. These were 20 children, 12 males and 8 females, who met the school district's criteria and who were receiving resource room help on a daily basis from a learning disabilities specialist. Their mean IQ, based on the Otis-Lennon Mental Ability Test, was 104.79

(S.D. =13.4): the group mean reading percentile. based on the Metropolitan Achievement Test, was 48.78 (S.D. = 26.03).

An equal number of nondisabled children was randomly selected from classmates who matched the learning disabled students on sex and grade. Their mean IQ was 103.90 (S.D. = 27 .3) and their group mean reading score was at the 70.6 percentile (S.D. = 19.9).

Children who played the role of talk show guests were randomly selected from normally achieving children who matched subjects on sex and grade.

Procedure

Each subject and his or her guest were brought to a room in the school which had been set up to resemble a television studio. The room contained two chairs facing a portable television camera and a videotape recorder. The experimenter then asked the children to help her put on a television talk show. She explained that the subject would be the talk show host and would interview the other child. Specifically, the subject was told:

"It's your show, so you have to be in charge. You have to introduce your guest and then get him/her to talk with you about his favorite television show or movies.... you'll have 3 minutes to talk with each other before it's time for a commercial. So it's your job to keep the show going until I tell you that the 3 minutes are up..."

The children's interactions were then videotaped and later transcribed.

Codes

Since the issue under investigation was the learning disabled children's ability to control the conversation, interactive variables like turn-taking style and distribution of talk between partners were of interest. A turn was defined as all utterances produced by one speaker which were bounded on either side by another speaker's utterances.

Each turn was then decomposed into statements representing the conversational acts described by Dore, Gearheart & Newman (1978).

Given the "talk show" format of the task, the natural unit of conversation, or "frame", appeared to be a three-turn sequence of (1) question; (2) response; and (3) confirmation of the response. Since questioning and response strategies have been found to reflect social control between conversational partners (Corsaro, 1979; Gleason, 1973; Mishler, 1975a, b), a coding system was designed to categorize conversational strategies for each position in this questioning sequence. Although additional categories from the Dore et al. taxonomy were used, the categories of interest are described below, with an example conversation.

- 1). Host: What do you think about violence on TV?
- 2). Guest: I like it.
- 3). Host: Oh. Well, what's your favorite show?
- 4). Guest: Mork and Mindy. Mork is just so funny.
- 5). Host: Did you see the time he turned into a baby?
- 6). Guest: Yeah, that was a good one.
- 7). Host: Do your parents let you stay up to watch
Saturday Night Live?
- 8). Guest: Sometimes.

Questions were categorized, following Dore et al., as choice, product or process. Choice questions solicited either-or judgments, as in turn 7 above. ("Do your parents let you stay up to watch Saturday Night Live?") Product questions solicited information in response to most WH interrogative pronouns, as in turn 3 ("What's your favorite show?"). Process questions were more open-ended in that they solicited extended descriptions or explanations, as in turn 1, ("What do you think about violence on TV?").

Responses Conversational turns which were responses to questions were coded as either canonical, i.e., providing the minimal information requested by the question or elaborated, i.e., going beyond the literal meaning of the question to expand on the topic.

Thus, canonical responses were "yes" or "no" to a Choice question, provided WH information to Product questions and explanations to Process question. In the example above, turns 2 and 8 are canonical responses, whereas turns 4 and 6 are elaborated.

Confirmations A confirmation was defined, following Mishler, as the first statement by the original questioner following the response to the question. Confirmations, which included both assertions and questions, were coded as either contingent, i.e., their propositional content was based on the previous speaker's turn, or noncontingent, i.e., they were non-sequiturs. For example, turn 5 ("Did you see the time he turned into a baby?") was clearly contingent on the previous remark. Turn 7, however, appears unrelated to Turn 6, and was considered noncontingent.

Contingent confirmations with no real propositional content, but which served to acknowledge the previous speaker's turn (for example, "oh, uh-huh") or to regulate the transition between turns (for example, "okay now, well") were subcategorized as Conversational Devices. Thus, the entire turn 3 was categorized as contingent because of its conversational device.

RESULTS

A research assistant unaware of the group status of the children was trained until inter-rater agreement for each category was greater than 80%. On reliability checks based on 10% of the transcripts, selected at random, mean inter-rater agreement was 81%.

For each dependent variable, an analysis of variance for unequal n's using the least squares solution was used to analyze the two (group) by two (sex) by two (grade) experimental design. Group means for significant findings are presented in Tables 1 and 2.

Conversational Turns The analyses of the total number of conversational turns which was produced by the Host and the Guest revealed a significant group by grade interaction, $F(1,33) = 4.90, p < .04$. Duncan's Multiple Range Test ($p = .05$) indicated that dyads with second grade learning disabled hosts had a greater number of speaker changes than did dyads with fourth grade learning disabled hosts; however, within each grade, the dyads with learning disabled and non-disabled hosts did not differ. To determine whether the hosts differed in the proportion of statements they contributed to the dyad's interaction, the number of statements produced by the Host was divided by the total number of statements made by both children. There were no main effects or interactions on the proportion of the statements contributed by the hosts. Hence, while second grade dyads with learning disabled hosts exchanged turns more frequently, the relative contributions of the conversational partners did not differentiate learning disabled from nondisabled children. Learning disabled hosts produced the same proportion of their dyads's statements as did nondisabled hosts.

Questions The proportions of Host and Guest statements which were questions were computed. There was a main effect for group on the proportion of the Host's statements which were questions, $F(1,33) = 7.68, p < .009$. In contrast to non disabled children, a smaller proportion of learning disabled children's statements were comprised of questions.

Analyses of the proportion of each question type, based on the number of each question type divided by the total number of questions asked, indicated that there was a main effect for group on Hosts' use of Process Question, $F(1,33) = 4.64, p < .03$. When learning disabled children asked a question, they were less likely than nondisabled children to produce Process Questions. A main effect for group was found on Guests' use of Choice Questions, $F(1,33) = 5.27, p < .02$. When Guests asked a question, they were more likely to ask learning disabled Hosts Choice Questions than were Guests of nondisabled Hosts.

Responses to Questions The proportion of guest responses which were elaborated was derived by dividing the number of elaborated responses by the total number of guest responses. The analysis of variance resulted in a main effect for group on Guests' use of elaborated responses $F(1,33) = 4.02, p < .05$. The Guests of learning disabled Hosts were less likely than Guests of nondisabled children to use Elaborated Responses.

Confirmations The analysis of variance of the proportion of confirmations produced by the Host which were contingent revealed only a marginally significant effect for grade, $F(1,33) = 2.97, p < .09$. The mean proportion of contingent responses increased from 24.3% in the second grade to 39.8% in the fourth grade.

Conversational Devices These were analyzed using proportions based on the number of conversational devices produced by the Host divided by the number of Host turns. The analysis of variance indicated that there was a significant group by grade interaction, $F(1,33) = 7.25, p < .01$, and a significant group by sex interaction, $F(1,33) = 4.36, p < .04$. The Duncan Multiple Range Test ($p = .05$) indicated that among second graders, conversational devices accompanied a higher proportion of the learning disabled children's conversational turns than the nondisabled children's turns. The proportion of turns in which a conversational device was used increased in the nondisabled children from the second to the fourth grade, with the result that there was no difference between the learning disabled and nondisabled groups in the fourth grade. Duncan's Multiple Range Test ($p = .05$) revealed that learning disabled girls used a higher proportion of conversational devices than did learning disabled boys or nondisabled children.

Discussion

The results of this study indicated that learning disabled children are cooperative conversational partners who can participate in the reciprocal exchange of turns. The dyads with learning disabled and nondisabled hosts did not differ in the number of speaking turns which they exchanged, and learning disabled hosts contributed the same proportion of talk to the conversation as did nondisabled hosts. However, the manner in which they fulfilled their conversational responsibilities indicates that they were less skilled than nondisabled children in initiating and maintaining a conversation with a peer, and that they were less able to sustain a dominant role than nondisabled children.

First, learning disabled children were less likely than nondisabled children to direct questions to their guests. Questioning has been shown to be an effective means of exercising control over a conversation; Mishler (1975a, b) has demonstrated that powerful speakers (that is, teachers) took control of conversations with children by successive questioning, and regained control by responding to children's questions with another question. Guests of learning disabled children in the current study asked a somewhat higher proportion of questions than did guests of nondisabled children, although this difference was not statistically significant ($\bar{X} = 11.7\%$ vs. $\bar{X} = 4.6\%$, respectively). Additional evidence that learning disabled children had difficulty retaining conversational control is the finding revealed by an examination of the transcripts. Out of 40 dyads, there were 9 dyads whose partners reversed roles, i.e., where the Guest also interviewed the Host. Eight of these 9 dyads included learning disabled hosts.

Second, learning disabled children were found to produce a smaller proportion of process questions, which, compared to choice or product questions, placed greater demands on the listener to produce extended explanations or narratives.

Similarly, guests of learning disabled children were more likely to produce choice questions. This reliance on question types which request fairly accessible information has been demonstrated in adult-child interaction, i.e., adults lighten the conversational load for children by producing questions whose answers are highly predictable or even available in the question (Corsaro, 1979; Gleason, 1973). Perhaps both the learning disabled hosts and their guests produced questions which require highly constrained responses because they were not confident of their listeners' willingness and/or ability to respond.

The findings that, compared to nondisabled children, learning disabled children used less sophisticated strategies for encouraging their guests to talk was corroborated by the result that their guests produced a smaller proportion of elaborative responses to their questions. However, this is not due simply to the learning disabled hosts' over-reliance on product and choice questions. In fact, since these question types request more specific information than process questions, it is easier for a response to a product or choice question to qualify as elaborated. Thus, some features of the learning disabled children's questions other than their grammatical form are inhibiting their guests' topic elaboration.

Finally, although learning disabled children did not differ from nondisabled children in the proportion of contingent confirmations they produced, learning disabled girls and learning disabled second graders began a greater proportion of their speaking turns with conversational devices. Perhaps these children compensated for difficulties in formulating propositions which are tied to their partners' turns by relying on conversational devices to smooth the transition between turns. Younger language impaired children have also been found to use more conversational devices than age-matched children, presumably as a means of participating in the conversation without taxing productive language abilities (Watson, 1977).

In sum, these results suggest that even when placed in a socially dominant position, learning disabled children are less able to maintain control of the conversation through questioning, and are less effective in eliciting extended replies from their guests. Clearly, these less assertive conversational strategies could still reflect learning disabled children's awareness of their unpopular status with peers. However, the sociometric measures collected on these subjects indicated that this particular group of learning disabled children was accepted by their peers.

What role did linguistic ability play in the evolution of these strategies? Although learning disabled children produced a smaller proportion of process questions, it is not clear that these require greater syntactic complexity than the other question types. However, the finding that guests of learning disabled children produced fewer elaborative responses suggests that the content or structure of the learning disabled children's questions was difficult to understand or expand. In addition, the trend that the learning disabled children's guest were more likely to take over the interviewer role and produced proportionally more choice questions also may indicate that the learning disabled hosts were having difficulty formulating questions and responses.

Whatever the source of learning disabled children's less assertive conversational strategies may be, it is likely that they also contribute to both academic and social difficulties. There is evidence that teachers' evaluations of children's cognitive abilities are affected by the children's understanding of the rules which govern classroom discourse (Mehan, 1979). The failure to assume conversational responsibility also seems likely to add to learning disabled children's social rejection by peers.

If these children continue to be avoided by their classmates because of their poor conversational skills, they will have fewer opportunities to model the appropriate use of language. Deficits in conversational competence may therefore become part of the cycle of social and educational failure experienced by learning disabled children.

TABLE 1

Number of turns (Host plus Guest)			Mean Proportion of Conversational Devices		
<u>Grade</u>			<u>Grade</u>		
	2nd	4th		2nd	4th
LD	135.4	91.46	LD	7.32	3.87
NLD	96.75	112.89	NLD	1.37	6.18

<u>Sex</u>		
	Boys	Girls
LD	2.52	8.67
NLD	3.90	3.65

TABLE 2

Mean Proportion of Statements
which were HOST QUESTIONS

LD	NLD
35.83	55.12

Mean Proportion of Questions
which were GUEST CHOICE QUESTIONS

LD	NLD
23.27	2.92

Mean Proportion of Questions
which were HOST PROCESS QUESTIONS

LD	NLD
8.74	19.94

Mean Proportion of Questions
which were GUEST ELABORATED RESPONSES

LD	NLD
29.85	45.57

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